

CLAIMS

We Claim:

- 1 1. A nucleic acid comprising a coding sequence of SEQ. I.D.
2 No. 1.
- 1 2. A host cell containing the heterologous nucleic acid of
2 Claim 1 or a nucleic acid complementary to said heterologous nucleic acid..
- 1 3. A polypeptide comprising an amino acid sequence of
2 SEQ. I.D. No. 2.
- 1 4. A host cell expressing the heterologous polypeptide of
2 Claim 3 of a heterologous polypeptide having at least 70% sequence identity
3 to said heterologous polypeptide.
- 1 5. A transgenic plant overexpressing a nucleic acid of SEQ.
2 I.D. No. 1 or a nucleic acid complementary to SEQ. I.D. 1.
- 1 6. A transgenic plant overexpressing a polypeptide selected
2 from the group consisting of an amino acid sequence shown in SEQ. I.D. No.
3 2 and an amino acid sequence having at least 70% identity to an amino acid
4 sequence shown in SEQ. I.D. No. 2.

1 7. A method of altering circadian rhythms and flowering in a
2 plant comprising transforming the plant with a nucleic acid sequence of SEQ.
3 I.D. No. 1 or a nucleic acid sequence complementary to SEQ. I.D. 1.

1 8. A method of altering circadian rhythms and flowering in a
2 plant comprising transforming the plant to alter expression of a polypeptide
3 having either an amino acid sequence of SEQ. I.D. No. 2 or an amino acid
4 sequence having at least 70% identity to the amino acid sequence of SEQ.
5 I.D. No. 2.

1 9. A method of altering circadian rhythms and flowering in a
2 plant comprising changing a level of activity of protein kinase CK2 within the
3 plant.